#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 69.15

## **SOURCE INSPECTION REPORT**

Resident Engineer: Pursell, Gary

Address: 333 Burma Road

Report No: SIR-001508

Date Inspected: 24-Feb-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 700
Prime Contractor: American Bridge/Fluor Enterprises, a JV OSM Departure Time: 1900

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Changxing Dao, Shangha

Quality Control Contact: William (Bill) Oak Quality Control Present: Yes No

**Material transfer:** Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A N/A Yes No OK to Cut: Yes No **Rebar Test Witness:** N/A N/A Yes No **Delayed/Cancelled:** Yes No

**Other:** Coatings Inspection

Bridge No: 34-0006 Component: OBG 4AW & Miscellaneous Metal

**Bid Item:** 77, 78, 79 **Lot No:** B265

### **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: OBG 4AW

A joint inspection was conducted today with Caltrans QA Lumley, ABF Bill Oak and ZPMC QC representatives to verify adhesion testing on the exterior surfaces of this segment. The following values were observed and recorded: 1) 4.45MPa 2) 5.19MPa 3) 5.12MPa 4) 2.86MPa all tests revealed complete adhesive failure with the applied Interzinc 22 remaining intact. A re-test is in place for value # 4 due to low adhesion value and the test site was adjacent to the previous location. International Protective Coatings technical service representative Zili Peng was present during all testing and inspection.

## Miscellaneous metal

A joint inspection was performed with Caltrans QA Lumley, ABF & ZPMC QA/QC representatives as well as International Protective Coatings technical service representative Zili Peng. Numerous base metal defects were observed and ZPMC personnel performed grinding operations. Approximately seven splice plates were rejected due to excessive fabrication defects which would require fill metal and welding repairs. ZPMC obtained profiles from numerous randomly selected base metal plates which ranged from 68-72um. ZPMC personnel also monitored the ambient conditions. Interzinc 22 application commenced on the remaining 400+- splice plates within the blast shop.

## **Summary of Conversations:**

# SOURCE INSPECTION REPORT

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Caltrans QA Lumley observed ABF Bill Oak instruct ZPMC QC to perform adhesion testing today.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

| Inspected By: | Lumley, James | Quality Assurance Inspector |
|---------------|---------------|-----------------------------|
| Reviewed By:  | Miller,Mark   | QA Reviewer                 |